



**BRAINWARE UNIVERSITY**

**Term End Examination 2018 - 19**

**Programme– Bachelor of Pharmacy**

**Course Name - Human Anatomy and Physiology I**

**Course Code -BP101T**

(Semester – 1)

**Time allotted:3 Hours**

**Full Marks : 75**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

**Group –A**

(Multiple Choice Type Question)

20 x 1 = 20

1. *Choose the correct alternative from the following*
  - (i) Which cells in the blood do not have a nucleus?
 

a. Lymphocyte	b. Monocyte
c. Erythrocyte	d. Basophil
  - (ii) Which of the following is flexible connective tissue that is attached to bones at the joints?
 

a. Adipose	b. Cartilage
c. Epithelial	d. Muscle
  - (iii) Which of the following terms describes the body's ability to maintain its normal state?
 

a. Anabolism	b. Catabolism
c. Tolerance	d. Homeostasis
  - (iv) The term cell was coined by
 

a. Schwann	b. Robert Hooke
c. De Bary	d. Tatum
  - (v) Smooth endoplasmic reticulum is site of
 

a. Protein Synthesis	b. Carbohydrate Synthesis
c. Lipid Synthesis	d. Amino acid Synthesis

- (vi) Skin contain
- a. Non- keratinised stratified epithelium
  - b. Keratinised stratified epithelium
  - c. Transitional epithelium
  - d. None of the above.
- (vii) In a normal human being number of chromosomes is
- a. 23
  - b. 46
  - c. 53
  - d. 26
- (viii) Purkinje fibres are present in :
- a. Kidney
  - b. Heart
  - c. Spleen
  - d. None of the above
- (ix) Which one of these act as a pacemaker in normal routine?
- a. AV node
  - b. Bundle of His
  - c. Purkinje fibre
  - d. S.A. node
- (x) DNA is mainly present in:
- e. Ribosome
  - f. Plasma membrane
  - g. Nucleus
  - h. None of the above
- (xi) The interval between each cell division is call:
- a. Metaphase
  - b. Anaphase
  - c. Interphase
  - d. Telophase
- (xii) Which one of these is the longest and strongest bone in the body
- a. Humerous
  - b. Tibia
  - c. Radius
  - d. Femur
- (xiii) The terminal portion of vertebral column is called:
- a. Coccyx
  - b. Sacrum
  - c. Fibula
  - d. None of the above
- (xiv) Ciliated epithelium is present in:
- a. Alimentary canal
  - b. Bronchioles
  - c. Anal canal
  - d. None of the above
- (xv) The Ion in highest concentration in the cells is
- a. Na
  - b. Mg
  - c. K
  - d. Ca
- (xvi) The term “Suicidal bags” is used for
- a. Lysosomes
  - b. Peroxisomes
  - c. Mitochondria
  - d. Ribosomes

- (xvii) In young adults, normal blood pressure is
- |                     |                    |
|---------------------|--------------------|
| a. 100/60 mm of Hg  | b. 80/80 mm of Hg  |
| c. 120/ 80 mm of Hg | d. 140/90 mm of Hg |
- (xviii) Food is converted to energy in:
- |                          |                 |
|--------------------------|-----------------|
| a. Nucleus               | b. Nucleolus    |
| c. Endoplasmic reticulum | d. Mitochondria |
- (xix) Which of the following is NOT the function of plasma membrane?
- |                                   |   |
|-----------------------------------|---|
| a. Intercellular interaction      | b. Assisting in chromosome segregation. |
| c. responding to external stimuli | d. Energy transduction                  |
- (xx) Which of the following types of junctions have protein that extends from one cell to another, thus “attaching” one cell to the other such as in the cells of the stratum spinosum?
- |                  |                     |
|------------------|---------------------|
| a. Gap Junctions | b. Tight Junctions  |
| c. Desmosomes    | d. All of the above |

**Group – B**

(Short Answer Type Questions)

7 x5 = 35

Answer any *seven* from the following

- |   |   |
|---|---|
| 2. Discuss the various types of bones of human skeleton system.               | 5 |
| 3. Write a note on mitochondria.  | 5 |
| 4. Explain the difference in structure and function of three types of muscle. | 5 |
| 5. Describe in details about the structure and function of nucleus.           | 5 |
| 6. Write a note on cell junction.   | 5 |
| 7. Enumerate various transport mechanism across cell membrane.                | 5 |
| 8. Write the composition and function of lymph.                               | 5 |
| 9. Differentiate between megaloblastic and sickle cell anemia.                | 5 |
| 10. Discuss the functions of skeleton system.                                 | 5 |

**Group – C**

(Long Answer Type Questions)

2x 10 = 20

Answer any *two* from the following

- |  |    |
|--|----|
| 11. Give the structure and function of skin with a neat labeled diagram. | 10 |
| 12. Write a note on basic process of life.                               | 10 |
| 13. Describe in details about cell division process.                     | 10 |

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